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10/613,866	07/02/2003	Lenny Lipton	95194936.044021	6251
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EXAMINER RICE, ELISA M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

reald@bakernet.com

Office Action Summary

Application No.

10/613,866

Applicant(s)

LIPTON ET AL.

Examiner

ELISA M. RICE

Art Unit

2624

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's amendments filed on 3/13/2009 have been received and entered. Claims 1-8 and 10-21 are pending.

Response to Arguments

Applicant's arguments with respect to claims 1, 13, and 16 have been considered but are moot in view of the new grounds of rejection as the arguments are directed to the newly added claim limitations.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 and 16 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. The Federal Circuit [1], relying upon Supreme Court precedent [2], has indicated that a statutory “process” under 35 U.S.C. 101 must (1) be tied to a particular machine or apparatus, or (2) transform a particular article to a different state or thing. This is referred to as the “machine or transformation test”, whereby the recitation of a particular machine or transformation of an article must impose meaningful limits on the claim's scope to

impart patent-eligibility (See *Benson*, 409 U.S. at 71-72), and the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity (See *Flook*, 437 U.S. at 590"). While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform an article nor are positively tied to a particular machine that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. That is, the method includes steps of extracting, retaining, comparing, detecting, etc. is of sufficient breadth that it would be reasonably interpreted as a series of steps completely performed mentally, verbally, or without a machine. The cited claims do not positively recite any structure within the body of the claim which ties the claim to a statutory category. Furthermore, the examiner suggests that the structure needs to tie in the basic inventive concept of the application to a statutory category. Structure that ties insignificant pre or post solution activity to a statutory category is not sufficient in overcoming the 101 issue.

1[1] *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

2 *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1, 7, 15, 16 are rejected under 35 U.S.C. 102(e) as being anticipated over Swift et al (US 2002/0122585 A1), hereinafter referred to as Swift 1 **(In order, to illustrate the inherency of an element of the claim, Swift et al. (US 6556236), hereinafter referred to as Swift 2, will also be utilized)**

Regarding claim 1 and claim 16, Swift 1 discloses a method for converting an input image having a first format to an output image having a second stereoscopic format, wherein the input image and the output image are each defined by a plurality of pixels, comprising:

receiving the input image having the first format at a format converter (Swift 1, script buttons, paragraph 50) configured to receive input images in multiple formats (Swift 1, Fig. 1, item 12; Swift 1, "can store and preserve various types of stereo media in various formats", paragraph 54) and convert input images in different formats into images having stereoscopic formats (Swift 1, Fig. 1, num. 16, 18, 20);;

converting each pixel of the input image to a corresponding pixel for the output image, thereby creating the output image (Swift 1, "monoscopic and stereoscopic viewing that allows greater distribution since both types can be viewed within one system; save and

conversion of one format into another from the Internet using a local drive from the original source," paragraph 27; Swift 1, paragraph 51 and 52); formatting the output image based upon the validity (recombined scaled left and right media, Swift 1, figure 6, numeral 508, paragraph 0041); and displaying the formatted output image (Swift 1, "displays it on the user side according to the user's display preferences," paragraph 52).

Swift 1 inherently discloses using a map to set forth a predefined relationship between the first format and the second stereoscopic format to establish validity of the converting of the input image to the output image for a desired display method (Swift 1 reference, paragraph 58 and 59), thereby creating the output image. Turning to Figure 1, in order for the first media format to be converted to one of several stereoscopic formats such as line-interleaved, cross-eye, etc., the processor will need to use a formula, mathematical equation or predefined relationship of some sort to get from the input format (which in this case would be item 12, of fig. 1 to one of the stereoscopic formats depicted on the right hand side, such as item 18, of figure 1. In order words, a predefined relationship, which will vary depending on the input format and output format, will be relied upon by the processor to convert the input image to the output image. As discussed in paragraph 50, script buttons are used to change the formatting and by necessity, the script buttons, (i.e. format converter) require a predetermined relationship to map the pixel elements of an input image to those of the second format output image. A formula of some kind is utilized by the script button to effect this change

(See Swift 2's Fig. 4C and 5A's whose various format conversions illustrate quite well the necessity of a predefined mapping relationship between input format images and output format images).

While Swift 1 does not explicitly disclose a support table matrix, a support table matrix is essentially a table-like matrix, otherwise known as a look-up table, used for supporting the conversion from an input pixel to an output pixel and is just one of many commonly used input-output mapping formats known to those of ordinary skill in the art.

Regarding claim 7, Swift 1 discloses the method of claim 1, wherein the input image is a planar image, further comprising creating a stereo image pair from the planar image (Swift 1, paragraph 46, first sentence; Swift 1, "converting a 2D object movie to a 3D stereoscopic object movie", paragraph 30).

Regarding claim 15, Swift 1 discloses the method of claim 1, wherein the first format is planar (Swift 1, "converting a 2D object movie to a 3D stereoscopic object movie", paragraph 30).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 2, 13, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swift et al (US 2002/0122585 A1), hereinafter referred to as Swift 1, and Swift et al. (US 6556236), hereinafter referred to as Swift 2.

Regarding claim 2 and 17, Swift 1 discloses a method according to Claim 1, but does not disclose wherein the converting step includes creating the map specifically as a support table matrix that sets forth predefined relationships between one type of format as an input image and another type of stereoscopic format as an output image.

Swift 2 teaches wherein the converting step includes creating the map specifically as a matrix that sets forth predefined relationships between one type of format as an input image and another type of stereoscopic format as an output image (Swift 2, Fig. 4C; Swift 2, Fig. 5A; Swift 2, "The object mappings mmcr and mmcl can be either physical optical imaging mappings or virtual geometric mappings implemented with software or hardware", column 10, lines 51-54; Swift 2, column 16, line 48-50, Swift

2, column 16, lines 45-48, Swift 2, column 16, lines 43-44; Swift 2, column 17, line 12-13; Swift 2, column 17, line 30-31).

Swift 1 and Swift 2 are both in the same field of endeavor of electronic stereoscopic systems. It, therefore, would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Swift 1 to use a map created as a matrix specifically since this is one of several methods commonly available to implement a mapping to effect a format conversion as known to the ordinary practitioner in the art.

Regarding claim 13, Swift 1 discloses a device for converting an input image having a first format to an output image having a second stereoscopic format (Swift 1, Fig. 1), wherein the input image and the output image are each defined by a plurality of pixels (Swift 1, paragraph 32, last sentence) and using a processor (Swift 1, paragraph 73) configured to identify the first format of the input image and convert the input image to an output image having the second stereoscopic format (Swift 1, paragraph 52, first sentence; Swift, paragraph 3; Swift, paragraph 27, first sentence; Swift, Fig. 1).

Swift 2 teaches comprising a software-enabled (Swift 2, "The object mappings mmcr and mmcl can be either physical optical imaging mappings or virtual geometric mappings implemented with software or hardware", column 10, lines 51-54) matrix that sets forth predefined relationships between one format for image input and a different format for image output to establish validity of the converting of the input image to the output image for a desired display method (Swift 2, column 16, line 48-50, Swift 2,

column 16, lines 45-48, Swift 2 establishes validity by making proper conversions), wherein the different format is a stereoscopic format and convert the input image using the software-enabled matrix to an output image having the second stereoscopic format (Swift 2, column 17, line 12-13) and convert the input image using the software-enabled matrix to an output image having the second stereoscopic format (Swift 2, Fig. 4C; Swift 2, Fig. 5A)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Swift 1 to include the map setting forth a predefined relationship between the first format and the second stereoscopic format as taught by Swift 2 because, advantageously, the output values “can be evaluated in a massively parallel manner” (Swift 2, column 16, lines 43-44).

Regarding claim 14, the combination of Swift 1 and Swift 2 discloses a device according to claim 13, wherein the software-enabled matrix contains for each type of image format a pre-defined correspondence between a pixel from the input image and a pixel for the output image (Swift 2, column 17, line 12-13; Swift 2, column 17, line 30-31).

4. Claims 3-6, 8-12 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Swift et al (US 2002/0122585 A1) (Swift et al. (US 6556236)), further in view of Loveridge et al (US 5,982,941).

Regarding claims 3-6, while the combination of Swift 1 and Swift 2 discloses a method according to Claim 1, the combination of Swift 1 and Swift 2 does not disclose converting the color space of the input image; scaling the input image; creating additional views as needed; swapping views; preparing a presentation of the output image for a particular format type; centering the presentation; formatting the presentation thereby creating a formatted output image; displaying the formatted output image; inverting the input image after the scaling step and before the creating; aligning the views after the creating step and before the swapping step; and arranging a predefined view wherein a single frame contains nine vies, then interzigging the views after the swapping step and before the preparing step.

Loveridge teaches converting the color space of the input image (Loveridge, figure 3, numeral 118); scaling the input image (Loveridge, figure 3, numeral 120); creating additional views as needed (Loveridge, figure 3, numeral 122); swapping views (Loveridge, figure 3, numeral 122, 124); preparing a presentation of the output image for a particular format type (Loveridge, figure 3, numeral 122, 124, column 6, lines 5-67); centering the presentation (Loveridge, figure 3, numeral 122, 124, column 6, lines 5-67); formatting the presentation thereby creating a formatted output image (Loveridge, figure

3, numeral 128); displaying the formatted output image (Loveridge, figure 3, numeral 82); inverting the input image after the scaling step and before the creating step (Loveridge, column 6, lines 9-67); aligning the views after the creating step and before the swapping step (Loveridge, column 6, lines 9-67) and arranging a predefined view wherein a single frame contains nine vies, then interzigging the views after the swapping step and before the preparing step (Loveridge, column 6, lines 9-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Swift 1 and Swift 2's converting step to include Loveridge's method steps in order "to achieve improved performance characteristics, such as reduced noise, improved sharpness" as discussed in the Loveridge reference at col. 3, lines 61-67.

Regarding claim 8, while the combination of Swift 1 and Swift 2 discloses a method according to Claim 7, the combination of Swift 1 and Swift 2 does not disclose scaling the planar image by a fixed percentage to create a scaled image; copying the scaled image to create a complimentary image; shifting the complimentary image by a smaller percentage of the fixed percentage; extracting a centered image from the scaled image; and extracting a centered image from the shifted complimentary image.

Loveridge teaches scaling the planar image by a fixed percentage to create a scaled image (Loveridge, figure 3, numeral 120); copying the scaled image to create a

complimentary image (Loveridge, figure 3, numeral 122); shifting the complimentary image by a smaller percentage of the fixed percentage (Loveridge, column 6, lines 9-67); extracting a centered image from the scaled image (Loveridge, figure 3, numeral 124); and extracting a centered image from the shifted complimentary image (Loveridge, column 6, lines 9-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Swift 1 and Swift 2's creating step to include Loveridge's method steps in order "to achieve improved performance characteristics, such as reduced noise, improved sharpness" as discussed in the Loveridge reference at col. 3, lines 61-67.

Regarding claim 10, while the combination of Swift 1, Swift 2, and Loveridge discloses shifting the complimentary image by a smaller percentage of the fixed percentage, the combination of Swift 1, Swift 2, and Loveridge does not disclose expressly that the smaller percentage is half.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize a smaller percentage that is half. Applicant has not disclosed that the smaller percentage being half provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the

smaller percentage taught by Loveridge or the smaller percentage being half because both percentage perform the same function of reducing the complimentary image for display purposes.

Therefore, it would have been obvious to one of ordinary skill in this art to modify Loveridge to obtain the invention as specified in claim 10.

Regarding claim 11, the method claim is rejected under the same combinations, teachings, and motivation as claim 8.

Regarding claim 12, the method claim is rejected under the same combinations, teachings, and motivation as claim 10.

Regarding claim 18-21, while the combination of Swift 1 and Swift 2 discloses a method according to Claim 16, the combination of Swift 1 and Swift 2 does not disclose converting the color space of the input image; scaling the input image; creating additional views as needed; swapping views; preparing a presentation of the output image for a particular format type; centering the presentation; formatting the presentation thereby creating a formatted output image; displaying the formatted output image; inverting the input image after the scaling step and before the creating; aligning the views after the creating step and before the swapping step; and arranging a

predefined view wherein a single frame contains nine views, then interzigging the views after the swapping step and before the preparing step.

Loveridge teaches converting the color space of the input image (Loveridge, figure 3, numeral 118); scaling the input image (Loveridge, figure 3, numeral 120); creating additional views as needed (Loveridge, figure 3, numeral 122); swapping views (Loveridge, figure 3, numeral 122, 124); preparing a presentation of the output image for a particular format type (Loveridge, figure 3, numeral 122, 124, column 6, lines 5-67); centering the presentation (Loveridge, figure 3, numeral 122, 124, column 6, lines 5-67); formatting the presentation thereby creating a formatted output image (Loveridge, figure 3, numeral 128); displaying the formatted output image (Loveridge, figure 3, numeral 82); inverting the input image after the scaling step and before the creating step (Loveridge, column 6, lines 9-67); aligning the views after the creating step and before the swapping step (Loveridge, column 6, lines 9-67) and arranging a predefined view wherein a single frame contains nine vies, then interzigging the views after the swapping step and before the preparing step (Loveridge, column 6, lines 9-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Swift 1 and Swift 2's converting step to include Loveridge's method steps in order "to achieve improved performance characteristics, such as reduced noise, improved sharpness" as discussed in the Loveridge reference at col. 3, lines 61-67.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ELISA M. RICE** whose telephone number is (571)270-1582. The examiner can normally be reached on 12:00-8:30p.m. EST Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on (571)272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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